

Amendments to the Claims:

Claims 1-10 are pending in this application. Claim 1 is independent.

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1 (CURRENTLY AMENDED): A measuring device, comprising:

a diffraction grating for diffracting incident light to resolve the light into a plurality of diffraction lights having different orders;

first detecting means for measuring an intensity of a predetermined diffraction light, of the plurality of diffraction lights;

second detecting means for measuring an intensity of a diffraction light other than the diffraction light received by said first detecting means, and being reflected by an object to be measured,

wheren a result of measurement by said second light detecting means is corrected using a result of measurement by said first detecting means.

2 (CURRENTLY AMENDED): A measuring device according to claim 1, wherein the diffraction light to be detected by said second detecting means is ~~zero-th~~ zero-th order diffraction light diffracted by said diffraction grating.

3 (CURRENTLY AMENDED): A measuring device according to claim 1, further comprising a spectroscope for making the light to be projected upon said diffraction grating, into approximately monochromatic light.

4 (ORIGINAL): A measuring device according to claim 1, further comprising a condensing mirror provided between said diffraction grating and said first detecting means.

5 (ORIGINAL): A measuring device according to claim 4, wherein said condensing mirror comprises one of a concave-surface toroidal mirror, a cylindrical mirror, a spherical mirror, and a revolutionally elliptical-surface mirror.

6 (ORIGINAL): A measuring device according to claim 4, wherein, in a plane containing central axes of incident light and reflected light upon and from said condensing mirror, said diffraction grating and said first detecting means are approximately conjugate with each other with respect to the condensing mirror.

7 (ORIGINAL): A measuring device according to claim 1, wherein said diffraction grating is a plane diffraction grating of laminar type or blaze type.

8 (CURRENTLY AMENDED): A measuring device according to claim 3, wherein the approximately monochromatic light is one of EUV light, soft x-rays, and x-rays.

9 (ORIGINAL): A measuring device according to claim 3, further comprising a curved-surface reflection mirror disposed between said spectroscope and said diffraction grating.

10 (CURRENTLY AMENDED): A measuring device according to claim ~~[[8]]~~ 9, wherein, in a plane containing central axes of incident light and reflected light upon and from said curved-surface reflection mirror, an exit pupil of said spectroscope and said diffraction grating are approximately conjugate with each other with respect to said curved surface reflection mirror.

11 (NEW): A device according to claim 1, wherein a change in a result of measurement of said second detecting means due to a change in an intensity of rays emitted from a light source and incident on said diffraction grating is compensated using a result of measurement of said first detecting means.

12 (NEW): A device according to claim 1, further comprising a concave reflection mirror, disposed between said diffraction grating and said first detecting means for providing a conjugate relation between said diffraction grating and said first detecting means, wherein the incident light comprises a plurality of different wavelengths.

13 (NEW): An apparatus for manufacturing a semiconductor element, said apparatus comprising:
a light source for emitting x-rays, soft x-rays, EUV or the like;
an object measured by said measuring device as defined in claim 1,
wherein a semiconductor element is manufactured using the light emitted from said light source and coming by way of said object.

14 (NEW): A measuring device, comprising:
a diffraction grating for diffracting incident light to resolve the light into a plurality of diffraction lights having different orders;
first detecting means for measuring an intensity of a predetermined diffraction light, of the plurality of diffraction lights;

second detecting means for measuring an intensity of a diffraction light other than the diffraction light received by said first detecting means, and being reflected by an object to be measured; and

a concave reflection mirror, disposed between said diffraction grating and said first detecting means for providing a substantial conjugate relation between said diffraction grating and said first detecting means;

wherein the incident light comprises a plurality of different wavelengths.

15 (NEW): A device according to claim 14, wherein zero-th order diffraction light emergent from said diffraction grating is directed to said second detecting means.

16 (NEW): An apparatus for manufacturing a semiconductor element, said apparatus comprising:

a light source for emitting X-rays, soft x-rays, EUV or the like;

an object measured by said measuring device as defined in claim 14,

wherein a semiconductor element is manufactured using the light emitted from said light source and coming by way of said object.